APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/751,623	12/29/2000	Akhilesh Kumar	2207/9860	8608

7590 12/14/2005	EXAMINER
KENYON & KENYON	HUYNH, KIM T
Suite 600	

ART UNIT	PAPER NUMBER

333 W. San Carlos, Street
San Jose, CA 95110-2711

ART UNIT: 2112

DATE MAILED: 12/14/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *11 November 2005.*

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-4,6-13 and 15-24* is/are pending in the application.

　　4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-4,6-13 and 15-24* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *02 January 2001* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

　　Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

　　Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

　　a)☐ All b)☐ Some * c)☐ None of:

　　　　1.☐ Certified copies of the priority documents have been received.

　　　　2.☐ Certified copies of the priority documents have been received in Application No. _____.

　　　　3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

　　* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☐ Notice of References Cited (PTO-892)
2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3)☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5)☐ Notice of Informal Patent Application (PTO-152)
6)☐ Other: _____.

DETAILED ACTION

Receipt Acknowledgement

1.   Receipt is acknowledged of the request filed on 11th of November 2005 for a

request for continued examination (RCE) under 37 CFR 1.114 based on the application

No. 09/751623, which the request is acceptable and an RCE has been established.

Currently, claims 1-4, 6-13, 15-24 are pending in this application.

Claim Rejections - 35 USC § 103

2.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

3.   Claims 1-4, 6-13, 15-24 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Morrison et al. (Pub. No.: US 2002/0038398) in view of

Srangdhar et al. (US RE38,388)

As per claims 1,10, 19 Morrison discloses a method for executing a locked bus

transaction in a multi-node system, comprising:

- initiating a locked-bus transaction at a bus agent;[0025],

- transmitting a locked-bus request to a first node controller; and [0025]

- asserting a signal to said bus agent by said first node controller to prevent

    said bus agent from initiating a bus transaction.[0026-0028], wherein

    IOKILL signal notifies the I/O bridges via bus to stop issuing transactions

because of a pending locked transaction implies preventing agent from

initiating)

Morrison disclose all the limitations as above except deferring the

locked-bus transaction at the bus agent by said first node controller.

However, Sarangdhar discloses a memory agent or I/O agent in the

computer system may defer a response on any request other than a bus

locked request, another deferred reply transaction, or a cache line write

designated for explicit writeback. (col.11,lines 52-55) Furthermore,

Sarangdhar discloses at col.10, lines 26-38) a transaction can be retried

when the DEFER# signal asserted. A bus agent incapable of supporting a

deferred response will provide a retry response if unable to provide the

required response at the time of the response phase.

It would have been obvious to one having ordinary skills in the art

at the time the invention was made to incorporate Sarangdhar's teaching

into Morrison's system so as to minimize cost for bus agents unable to

accommodate split transactions. (col.2, lines 40-50)

As per claims 2,11, Morrison discloses the method further comprising

transmitting the locked-bus request from the first node controller to a second

node controller(fig.2, 222), [0027], [0023], wherein controller 222 corresponding

to one of nodes 107-109).

As per claims 3,12, Morrison discloses the method further comprising preventing

bus transactions on a bus coupled to said second node controller. [0035],

wherein retries transaction implies preventing if not available)

As per claims 4,13, 20, Morrison discloses the method further comprising

performing the locked-bus transaction by the bus agent over the multi-node

system.[0021]

As per claims 6,15, Morrison discloses the method further comprising the

method further comprising transmitting the locked-bus request from the first node

controller to a second node controller. (fig.2, 222), [0027], [0023], wherein

controller 222 corresponding to one of nodes 107-109)

As per claims 7,16, Morrison discloses the method further comprising preventing

bus transactions on a bus coupled to said second node controller.[0035]

As per claims 8,17, Morrison discloses the method further comprising

deasserting said signal to said bus agent by said first node controller.[0028]

As per claims 9,18, Morrison discloses the method further comprising performing

the locked-bus transaction by the bus agent over the multi-node system.[0021]

As per claim 21, Morrison discloses the method for executing a locked bus

transaction in a multi-node system, comprising:

- initiating a locked-bus transaction at a bus agent for a first I/O node

  including a first I/O device; [0017], [0025], [0027]

- transmitting a locked-bus request to a first node controller; and

[0025],[0027]

Morrison disclose all the limitations as above except deferring the locked-bus transaction at the bus agent by said first node controller. However, Sarangdhar discloses a memory agent or I/O agent in the computer system may defer a response on any request other than a bus locked request, another deferred reply transaction, or a cache line write designated for explicit writeback. (col.11,lines 52-55) Furthermore, Sarangdhar discloses at col.10, lines 26-38) a transaction can be retried when the DEFER# signal asserted. A bus agent incapable of supporting a deferred response will provide a retry response if unable to provide the required response at the time of the response phase.

It would have been obvious to one having ordinary skills in the art at the time the invention was made to incorporate Sarangdhar's teaching into Morrison's system so as to minimize cost for bus agents unable to accommodate split transactions. (col.2, lines 40-50)

As per claim 22, Morrison discloses the method further comprising transmitting the locked-bus request from the first node controller to the first I/O node [0025], [0027]

As per claim 23, Morrison discloses the method further comprising preventing transactions at the first I/O node for I/O devices coupled in said first I/O node. [0035]

As per claim 24, Morrison discloses method further comprising performing the locked-bus transaction by the bus agent over the multi-node system to the first I/O device. [0021], [0027]

Response to Amendment

4.   Applicant's amendment filed on 11/11/05 have been fully considered but does not place the application in condition for allowance.

a. In response to applicant's argument that the combination of Morrison and Sarangdhar fail to teach method comprising asserting a signal to said bus agent by said first node controller to prevent said bus agent from initiating a bus transaction. Examiner respectfully disagrees, as Morrison notes at ([0026-0028], Examiner further cited for clarification) discloses the IOKILL signal notifies the I/O bridges via bus to stop issuing transactions because of a pending locked transaction, this equivalent to applicant's claimed preventing agent from initiating. Furthermore, Morrison discloses from figure 3, step 302, the system retries the transaction, this is also implies preventing agent from initiating. Thus, the prior arts teach the invention as claimed and the amended claims do not distinguish over the prior art as applied.

Conclusion

5.   *Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kim Huynh whose telephone number is (571)272-3635 or via e-mail addressed to [kim.huynh3@uspto.gov]. The examiner can normally be reached on M-F 9.00AM- 6:00PM. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rehana Perveen can be reached at (571)272-3676 or via e-mail addressed to [rehana.perveen@uspto.gov].*

The fax phone numbers for the organization where this application or proceeding is assigned are (571)273-8300 for regular communications and After Final communications. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (571)272-2100.

Kim Huynh

Dec. 5, 2005

TIM VO
PRIMARY EXAMINER